

Arsenic Regulation Development  
State Board of Health Briefing Paper  
May 29, 2002

**Decision Needed:**

The Department of Health, Division of Drinking Water, is requesting that the State Board of Health initiate the rule making process for Group A (chapter 246-290 WAC) and Group B (chapter 246-291 WAC) water systems to incorporate the revised federal Arsenic Rule. In addition, chapter 246-290 WAC will include the federal Long-Term 1 Enhanced Surface Water Treatment Rule and other selected rule clarifications. DOH is requesting a board sponsor for this rule process.

**Summary of Problem:**

The 1996 federal Safe Drinking Water Act amendments mandated the Environmental Protection Agency (EPA) to finalize a maximum contaminant level (MCL) for arsenic by January 2001. The National Research Council (NRC) reviewed the science relating to arsenic toxicity and concluded the existing MCL of 50 parts per billion (ppb) needed to be reduced. EPA lowered the drinking water standard for arsenic from 50 ppb to 10 ppb in January 2001, following years of contentious debate over what is considered an allowable level of arsenic in drinking water. However, due to concerns relating to existing science and cost the lower MCL was put on hold as the Bush Administration transitioned into office. In March 2001, a new NRC panel was convened to further review the underlying science supporting the lower standard. In October 2001 the arsenic drinking water standard of 10 ppb was re-instated with a compliance date of January 2006. Ingestion of arsenic has been reported to cause over 30 adverse health effects including cardiovascular disease, diabetes mellitus, skin changes and various forms of cancer. The new, more stringent MCL of 10 ppb will lessen people's long-term exposure to arsenic in drinking water, thereby reducing their overall risk of adverse health effects.

Group A public water systems

- To maintain primacy for the Safe Drinking Water Act, DOH must adopt rules for Group A water systems that are at least as stringent as the revised federal rule.
- EPA strengthened the federal standard for arsenic in drinking water by reducing the allowable level from 50 ppb to 10 ppb. The new standard became effective in February 2002. From a public health perspective, the fact that drinking water systems have until January 2006 to comply with the new standard represents a significant challenge. This delay represents EPA's effort to balance public health protection with the cost of installation and operation of treatment technologies. The new arsenic standard is among the costliest of new EPA rules and will require substantial investment by communities with arsenic detections above 10 ppb.

Group B public water systems

- A number of Group B systems and private wells are known to exceed the new arsenic standard. Local health jurisdictions in some counties are moving ahead (based upon legal advice) to adopt the new standard of 10 ppb for new Group B water systems/sources and for new private wells. Whatcom and Snohomish counties have adopted the new standard for private wells and want to do the same for Group B water systems. Given the delay in compliance (2006), many counties are looking to the State Board of Health and DOH to show leadership on the arsenic standard, particularly relating to new water systems.

Washington has several high-profile arsenic issues (Asarco smelters and area-wide contamination). People can be exposed to arsenic through multiple environmental pathways. Therefore, it is important to take steps now to initiate actions that ultimately will reduce exposure to arsenic in drinking water. Exposure to arsenic is receiving significant media attention. The Seattle Times and Seattle Post-Intelligencer are currently working on investigative reports on arsenic that are focused on whether people have received

timely information regarding arsenic in soil, and if state and local agencies are acting appropriately and expeditiously to protect public health.

**Major stakeholders and interests:**

- Group A and B water system purveyors regarding impacts and costs.
- Local health jurisdictions with primary regulatory authority for Group B water systems and local governments who have responsibility for single family wells through the adequacy requirements in the Growth Management Act.
- Various environmental groups, water consumers, and the media due to the various pathways of exposure and the potential health risks.

**Background information attached:**

DOH has developed publications for communicating to the public and water purveyors. The following publications are attached for your review:

- The Guidelines for Water Purveyors, Arsenic in Drinking Water – Fact Sheet, which describes impacted systems and revised requirements, in addition to providing information on financial assistance and available treatment options for arsenic removal.
- Arsenic in Drinking Water – Questions and Answers, that provide general background information on arsenic, the more stringent standard, and general health effects.

**Recommended response:**

- The State Board of Health agrees that a potential health impact exists and will begin the rule making process by filing the CR-101. Carl Osaki will be directed to be the board's sponsor for the arsenic rule making process.
- The board will provide direction on an interim communication plan and encourage local health jurisdictions and local governments to take strong leadership to reduce people's exposure to arsenic by adopting the standard of 10 ppb as soon as possible for new Group B water systems/sources and private wells.

**Other options considered:**

- Emergency rule adoption is not an option because the desired outcome does not qualify as a public health emergency. Arsenic is considered a chronic rather than an acute risk to public health.
- DOH also considered an exception rule making process. The Administrative Procedures Act does not allow for exception adoption because the state rule will include substantive change from the federal rule (more stringent than the federal standard) so this option will not be pursued.
- A resolution by the State Board of Health was considered; however, it was determined that a "resolution" does not carry the weight needed and is not legally enforceable.

**Communication needed:**

DOH Division of Drinking Water will develop and implement a detailed communication plan for the following reasons:

- Reducing potential for public health impacts.
- Clarifying confusion surrounding the delay in compliance with the new standard.
- Addressing contention around the more stringent standard and the cost of treatment.
- Identifying key messages and promoting information exchange in the interim period before the rule becomes effective.
- Informing systems of the availability of low interest state revolving fund loans for arsenic treatment planning and capital improvements.

**Contact for further information:**

Denise A. Clifford, Constituent Relations Manager, (360) 236-3098